

FURTHER NOTES ON SOME SPECIES OF PLEOCOMA
(Coleoptera, Scarabaeidae)

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Pleocoma venturae Linsley, new species

Male: Form large, robust, broadly oblong-oval, only moderately convex; integument mostly dark or reddish-brown; pubescence golden yellow. *Head* coarsely punctate, with a broad smooth band extending from antero-basal angle of ocular canthi to base of vertical horn; clypeus moderately coarsely, irregularly punctate, clothed with long erect hairs, anterior process with anterior face nearly vertical, slightly concave, apex deeply, obtusely notched, apical angles moderately acute; vertical horn elongate, gradually narrowed toward apex, apex with a broadly arcuate notch, surface clothed with long hairs; ocular canthi projecting forward slightly from a right angle, anterior margin slightly concave; palpi and antennae reddish, lamellae brownish, scape conical, about twice as long as apical width, second segment moniliform, about twice as wide as long, third segment elongate, slender, about as long as scape, at least three times as long as greatest width, fourth segment with an acute process, segments five to eleven distinctly lamellate, lamella of fifth segment two-thirds as long as that of sixth, lamella of sixth more than three-fourths as long as that of seventh segment, that of eighth a little shorter than ninth, lamella of ninth segment longest, those of tenth and eleventh segments decreasing in length, ratios of segments five to eleven 26:36:43:44:45:42:38. *Pronotum* approximately twice as wide as long, barely widest at posterior angles, posterior angles rounded, anterior concavity a little more coarsely punctate than disk, subglabrous, lateral discal impressions usually at middle, pubescence fine, sparse; legs clothed with long, golden hairs. *Elytra* together about one-fourth longer than broad, surface shining, finely, sparsely punctate, geminate striae very feeble. *Abdomen* reddish-brown, sternites coarsely but irregularly and not closely punctate. Length 27.5 mm.

Female: Form elongate oval, widest behind middle; color dark reddish-brown. *Head* with clypeus broadly expanded apically, angles prominent, median notch shallow; vertical horn very short, consisting of little more than a pair of lobes; antennae pale reddish, lamellae brownish, fourth segment angulate, fifth with a short lamella, sixth to eleventh forming club. *Pronotum* twice as

broad as long, widest at posterior angles, distinctly and closely punctate, punctures larger and denser anteriorly, disk with a vague, sparsely punctate, median longitudinal line; scutellum glabrous, sparsely punctate. *Elytra* widest behind middle; length to breadth as 28:23, surface deeply but irregularly punctate. Length 38 mm.

Holotype male (No. 5462, Calif. Acad. Sci., Ent.) and twenty-seven paratypes, also males, from Squaw Flat, SESPE CANYON, VENTURA COUNTY, CALIFORNIA, December 11, 1937 (R. E. Barrett). I have associated with these, but not designated as allotype, a female, supposedly from Sespe Canyon but with the locality open to question, also from the collection of Mr. Barrett, to whom the writer is very much indebted for the privilege of studying the species.

P. venturae is a member of the *conjungens* group. It differs from *conjungens* by its larger size (male 24-30 mm. as compared with 20-23.5 mm.; female 38 mm. as compared with 26-28 mm.), the fourth antennal segment angulate, not lamellate, and the ocular canthi of the male projecting at an angle. The female further differs from that of *conjungens* by having the clypeus broadly expanded and angulate with the margin shallowly notched, and the pronotum and elytra more deeply punctate. From *P. lucia*, it differs in having a distinct lamella on the fifth segment of the antennae which is at least half as long as that of the sixth segment, and the pronotum widest at the basal angles. It also differs from *lucia* in size (26-28 mm. as compared to 23 mm.). From the remaining members of the *conjungens* group, *blaisdelli*, *hirsuta*, *nitida*, and *badia* it may be immediately distinguished by the sparsely punctate, sparsely hairy, anterior pronotal impression.

PLEOCOMA AUSTRALIS FALL

Males of this species were captured during a heavy rain at Mountain Center, San Jacinto Mountains, California, October 24, 1941, by Mr. D. DeLeon. At 3 P.M. on the same day, additional specimens were captured during a drizzling rain 2 miles north of Kenworthy Ranger Station, also in the San Jacinto Mountains. On October 26, 1940, males were flying at Lake Hemet¹, the only other record from the San Jacinto Mountains.

¹ Linsley, E. G. 1941, Pan-Pacific Ent., 17:152.

PLEOCOMA BADIA FALL

Three males of *P. badia* were taken by Mr. R. E. Barrett on Strawberry Peak, Tujunga Canyon, Los Angeles County, California, December 1, 1922. In one example the pronotum is piceous, as is true also of one specimen in my series from Mt. Wilson, the only previously known locality for the species.

PLEOCOMA BEHRENSI LECONTE

To the recorded localities for this species may be added Half Moon Bay, San Mateo County, California, October 30, 1937 (L. Jensen). This provides the most extended record for the species in a southwesterly direction.

PLEOCOMA FIMBRIATA LECONTE

Previously known only from El Dorado County (Placerville and Snowline) and Placer County, California. Taken at Nevada City, Nevada County, California, October 26, 1940, by W. F. Barr.

PLEOCOMA RICKSECKERI HORN

This species has heretofore been known only from the type locality: Sylvania, Sonoma County, California. It also occurs at Santa Rosa, Sonoma County and in Napa County at Angwin, California, where males were captured flying in the rain, on November 9, 1940, by Mr. M. I. Sherman.

PLEOCOMA TULARENSIS LEACH

Specimens in the collection of Mr. B. E. White are from 10 miles south of Mariposa, Mariposa County, California, providing the northernmost record for this species. Males were also taken at Northfork, Madera County, California, December 14, 1936, by T. W. Daniel.

PLEOCOMA HIRTICOLLIS VANDYKEI LINSLEY

A series of more than one hundred males and sixteen females of this subspecies, captured at Patterson Pass, Alameda County, California, by R. F. Smith, R. W. L. Potts, A. E. Michelbacher, and the writer, has afforded an opportunity to investigate varia-

tion in size, as determined by measurements of length from apex of clypeal horn to apex of elytra. The results follow:

MALES		FEMALES	
Length in millimeters	Number of specimens	Length in millimeters	Number of specimens
20.0	2	24.5	1
20.5	4	25.0	2
21.0	4	25.5	1
21.5	17	26.0	2
22.0	22	26.5	3
22.5	24	27.0	2
23.0	20	27.5	2
23.5	11	28.0	1
24.0	9	28.5	1
24.5	2	29.0	1
	115		16

Although the size ranges indicated above are outside of those ascribed to *P. hirticollis hirticollis* Schaufuss (males: 25-28 mm.; females: 33 mm.), this is probably the result of a different method of measurement. Of more significance, perhaps, is the relatively narrow size range evident in the sample. It remains to be seen whether or not other species exhibit a similar uniformity.

A male of *vandykei* was captured at Lafayette, Contra Costa County, California, on November 5, 1944, by R. F. Smith.

PLEOCOMA DUBITALIS DAVIS

Males and females of *P. dubitalis dubitalis* Davis were captured by K. M. and D. M. Fender, along Baker Creek, about 8 miles westnorthwest of McMinnville, Yamhill County, Oregon, on October 23, 1938. Elytra and other fragments have also been found by Mr. and Mrs. Fender along Panther Creek, 2 miles north of McMinnville. In the Baker Creek area, males were captured flying near dusk through sparse woods of Douglas fir, *Pseudotsuga taxifolia*, during the fall rainy season. Males were also taken along rather hard packed paths, as many as four or five together, attempting to dig down to females.

PLEOCOMA SP.

Imperfect specimens of an undetermined species of *Pleocoma* were taken in a forested area near Lyonsville, about 30 miles

east of Red Bluff, Tehama County, California, in the fall of 1935 by A. N. Smoot. They represent the first record for the genus in Tehama County and appear to belong to the *shastensis-carinata-simi* group.

PLEOCOMA SP.

Mr. H. H. Keifer has called my attention to larvae of *Pleocoma* from Leona Valley, Palmdale, Los Angeles County, California, where they were injuring apple roots. It is not possible at present to state just what species these represent, but in view of the nearness of the locality to the Sierra Madre Mountains it is possible that they may prove to be *P. badia* Fall, or, a little less likely, *P. hirsuta* Davis.

PLEOCOMA SP.

In the University of California collection there is a female *Pleocoma* from Mt. Diablo, Contra Costa County, California, collected by Mr. L. M. McQuesten. No species has been recorded previously from this mountain and in view of its isolation it is highly probable that it represents an undescribed species. The specimen clearly belongs to the *behrensi* group and appears to be related to *sonomae* Linsley as indicated by the 4-lamellate antennal club with the seventh antennal segment transverse, angulate but not lamellate. The vertical horn is very shallowly notched at the apex, the clypeus rounded.

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